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EXAMINER	
WOLLSCHLAGER, JEFFREY MICHAEL	
ART UNIT	PAPER NUMBER
1791	
MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/767,660	ARMELA ET AL.	
	Examiner	Art Unit	
	JEFFREY WOLLSCHLAGER	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 June 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7-12,14-28,81 and 82* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5, 7-12, 14-28, 81 and 82* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Applicant's amendment filed June 5, 2008 has been entered. Claims 1-5, 7-12, 14-28, 81 and 82 are pending and under examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-5, 7, 9, 11, 12, 14, 15, 18-27, 81 and 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eckhardt et al. (US 5,691,027) in view of Levitt et al. (WO 01/24654) and Leach et al. (WO 02/25789). *Note: Citations to Levitt et al. are provided from the U.S. equivalent document U.S. 6,592,800.*

Regarding claims 1 and 81, Eckhardt et al. teach a process of forming a composite product wherein woven or nonwoven fibers (col. 6, lines 38-53) are employed as a cover sheet (col. 2, lines 44-64; Figure 3; col. 5, lines 62-68), wherein the composite product is primarily in

roll form (col. 7, line 66-col. 8, line 9). The cover sheet is applied to the hooks of a base fastener product and is caused to adhere to the hooks of the fastener by the application of an adhesive (col. 6, lines 9-13). Additionally, Eckhardt et al. disclose controlling the adhesive strength between the cover sheet and the fastener to the required extent (col. 6, line 62-col. 7, line 34). While Eckhardt et al. suggest the base fastener product, to which the cover sheet is attached, may be formed in a variety of ways (col. 1, lines 12-46; col. 4, line 18-col. 5, line 4), Eckhardt et al. do not teach the specifics of such a method. Additionally, Eckhardt et al. do not teach that the fibers of the woven or nonwoven fibrous cover sheet are encapsulated by the resin of the distal ends of the projections.

However, Levitt et al. teach a method for making a mechanical fastener comprising providing a projection component comprising discrete projections/stems of resin extending from a surface of a base (Figures 1-4); locally heating the ends of the projections with a heater (50) that does not contact the projections yet causes the projections to soften/foreshorten and compressing/foreshortening the stems with a roller (44), (col. 2, lines 43-col. 3, line 55). Further Levitt et al. teach the method is suitable for forming rolls of fastener products (col. 9, lines 18-23).

Additionally, Leach et al. teach a method wherein the fibers of a preformed substrate are made to bond to the resin of a hook fastener product thereby taking advantage of the adhesive and encapsulating properties of the resin while forming a desired composite/laminate (page 4, lines 6-9; page 7, line 23 - page 8, line 20).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the method of Eckhardt et al. and to have formed the base fastener product by the method taught by Levitt et al. since Levitt et al. teach and suggest their process is an equivalent alternative method of forming a fastener product that

is known in the art to be suitable for use in rolled forms. Additionally, it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the method of Eckhardt et al. and to have replaced the adhesive used by Eckhardt et al. to attach the cover sheet to the hooks of the fastener with the adhesive and encapsulating capacity of the fastener resin itself, as suggested by Leach et al., for the purpose of eliminating the use of an extra adhesive material while still obtaining a desired bond between the fibrous cover sheet and the fastener product.

The examiner notes that while Leach et al. specifically disclose the bonding that occurs from utilizing the adhesive and encapsulating capacity of the fastener resin itself to attach the fibrous material to the fastener product is on the side opposite the hooks/stems of the fastener, the combination teaches and suggests the claimed invention for the reasons set forth.

As to claim 2, the combination teaches and suggests replacing the adhesive of Eckhardt et al. with the adhesive strength of the fastener resin as set forth above. As such, no adhesive is employed.

As to claims 3 and 4, Eckhardt et al. suggest some degree of pressing/affixing is employed to combine the cover sheet to the hooks of the fastener (col. 5, lines 62-col. 6, line12; col. 6, line 62-col. 7, line 32). Additionally, one having ordinary skill would have readily determined and optimized the amount pressure required to adequately adhere/affix the cover sheet to the fastener to ensure the desired degree of adhesion was achieved (col. 6, line 62-col. 7, line 32).

As to claim 5, Leach et al. disclose applying the pressure with a pair of pressure rolls (Figure 4). It would have been obvious to one having ordinary skill to have employed pressure rolls in the method of Eckhardt et al. for the purpose of ensuring a uniform attachment of the cover sheet to the fastener product.

As to claim 7, the combination suggests the distal ends of the resin is higher (Leach page 7, line 23 – page 8, line 20) than the temperature of the cover sheet (Eckhardt et al.).

As to claim 9, Eckhardt et al. suggest forming the base fastener product first followed by attaching the cover sheet to the fastener product (Example One).

As to claims 11 and 12, Eckhardt et al. teach the projections include heads that extend radially outward in multiple directions (Figure 6).

As to claim 14, Levitt et al. heat the distal ends with a radiant non-contact heater (50) (col. 5, lines 10-67).

As to claims 15 and 82, Eckhardt et al. teach the cover sheet may be made of woven or nonwoven fibers (col. 6, lines 38-53)

As to claims 18 and 19, Eckhardt et al. teach the projections can be made of a variety of materials and the cover sheet can be made of a woven or non-woven fibrous material, as well as a variety of other materials (col. 4, lines 18-65 and col. 6, lines 38-61).

As to claims 20 and 21, Eckhardt et al. suggest the cover sheet is thin (col. 6, line 25-28) relative to the thickness of the entire composite (col. 5, lines 28-31; col. 4, lines 25-29). Inclusion of the height of the projections further makes the fractional thickness of the cover sheet even lower.

As to claim 22, Eckhardt et al. teach adhering at locations of narrow bands or dots (col. 6, lines 9-12).

As to claim 23, Eckhardt et al. teach the cover sheet is releasably attached (col. 5, lines 62-67).

As to claim 24, the combination teaches and suggests bonding and encapsulating fibers of the cover sheet with resin of the distal ends as set forth in the rejection of claim 1 above.

As to claim 25, Eckhardt et al. teaches the cover sheet may also include pigments (col. 6, line 49).

As to claim 26, the combination teaches and suggests the same claimed process steps and employs the same claimed materials in the same claimed manner. As such, it follows that the same claimed effects and physical properties (i.e. leaves an imprint) are realized by the practice of the combined method.

As to claim 27, Eckhardt et al. teach "peeling" away the cover sheet and also teach controlling the adhesive strength to the desired level (col. 6, line 62-col. 7, line 34).

Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eckhardt et al. (US 5,691,027, previously of record) in view of Levitt et al. (WO 01/24654, previously of record) and Leach et al. (WO 02/25789), as applied to claims 1-5, 7, 9, 11, 12, 14, 15, 18-27, 81 and 82 above, and further in view of Aamodt et al. (US 6,303,062).

As to claim 8 and 10, the combination teaches the method as set forth above. Eckhardt et al. do not teach the sequence of performing the foreshortening and applying steps as claimed. However, Aamodt et al. disclose compressing/foreshortening the projections while applying the preformed substrate/layer (Figures 1-4). Further, the projections continue to be compressed after the layer is applied and the composite travels between the nips (56) and (58).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the method of Eckhardt et al. and to have performed the foreshortening and applying steps as taught by Aamodt et al. since Aamodt et al. teach that such a sequence of steps is known in the art and is known to be suitable for forming a fastener product (MPEP 2144.06-2144.07). Additionally, the examiner notes that the

sequence of performing process steps has been held to be *prima facie* obvious absent new or unexpected results.

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eckhardt et al. (US 5,691,027, previously of record) in view of Levitt et al. (WO 01/24654, previously of record) and Leach et al. (WO 02/25789), as applied to claims 1-5, 7, 9, 11, 12, 14, 15, 18-27, 81 and 82 above, and further in view of Provost et al. (U.S. 5,953,797).

As to claims 16 and 17, the combination teaches the method as set forth above. Eckhardt et al. do not teach the process as claimed. However, Provost et al. disclose a method of producing a fastener by the claimed process (Figure 6) to produce projections integrally molded with the base.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the method of Eckhardt et al and to have produced the base fastener material by the method disclosed by Provost et al. for the purpose of producing the material with conventional equipment in an economically viable manner as is routinely practiced in the art.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eckhardt et al. (US 5,691,027, previously of record) in view of Levitt et al. (WO 01/24654, previously of record) and Leach et al. (WO 02/25789), as applied to claims 1-5, 7, 9, 11, 12, 14, 15, 18-27, 81 and 82 above, and further in view of either of Tuman et al. (US 7,014,906) or Heindel et al. (US 5,961,761).

As to claim 28, the combination teaches the method set forth above. Eckhardt et al. do not teach the fibrous cover sheet touches the base of the fastener product. However, Tuman et

al. suggest a method wherein a fibrous material is employed to form a composite with a hook fastener such that the fibrous material touches the base of the fastener product to facilitate attachment between the fibrous material and the fastener product (Abstract; Figure 6; Figure 11; col. 9, lines 31-45) and Heindel et al. suggest that a fibrous cover material positioned over a hook fastener may be more strongly bonded together by intermittently forcing the fibrous cover sheet to touch the base material (Figure 10B; col. 7, lines 6-9; col. 7, line 46-col. 8, line 39)

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the teaching of Eckhardt et al. and to have contacted the base of the fastener product with the cover sheet as suggested by either of Tuman et al. or Heindel et al. for the purpose of further improving the bond between the fastener product and the cover sheet.

Response to Arguments

Applicant's arguments filed June 5, 2008 have been fully considered, but they are not persuasive. Applicant argues that one having ordinary skill would not have been led to believe that fibers could successfully be encapsulated in the resin of projections as set forth in the rejection. Applicant argues that one having ordinary skill would have been led to believe that encapsulation would have resulted in damage to the fastener member during separation. This argument is not persuasive. The examiner submits that Eckhardt employs adhesives generically to bond the top of the fastener stems to the fibrous sheet. Eckhardt controls the amount and location of the adhesive to control the bond strength (col. 6, line 62 - col. 7, line 34). From this starting point, the combination suggests utilizing the resin material of Leach, which adheres a fibrous sheet to fastener material, as the adhesive in Eckhardt. The combination suggests the equivalence of the resin adhesive of Leach and the general adhesive of Eckhardt.

In view of the combination and the teaching of Eckhardt to control bond strength, one having ordinary skill would have readily controlled the amount of resin adhesive utilized to achieve the desired results set forth by Eckhardt (e.g. releasable).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Keith (US 3,963,813) discloses a method of forming a cuspated sheet suitable for use as an interlocking fastener device (col. 4, line 10) wherein a fibrous sheet is impregnated with molten plastic from the ends of the projections on the sheet (Figures 8-11; col. 2, lines 7-15; col. 8, lines 1-10; col. 9, lines 44-55; col. 10, lines 27-40). The ends of the projections are heated by a non-contact heat source (Figure 8).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY WOLLSCHLAGER whose telephone number is (571)272-8937. The examiner can normally be reached on Monday - Thursday 6:45 - 4:15, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. W./
Examiner, Art Unit 1791

August 18, 2008

/Monica A Huson/
Primary Examiner, Art Unit 1791